



A m e n d e d C l a i m s

filed 23 December 2005

1. A method for closed die forging a product from a pre-form blank of a forgeable material,

5 c h a r a c t e r i z e d i n

- placing the blank in a press tool, said press tool including a number of centre and side members surrounding the blank,
- closing the press tool upon the blank by vertically clamping the blank between an upper and lower centre member,
- horizontally moving first and second side members synchronously towards said centre members centring the blank in the press tool,
- upsetting the outer parts of said blank with the first and second side members in a continuation of said horizontal movement,
- forcing the upper and lower centre members into the blank until the material of the blank fills a cavity defined by said centre and side members, by which the blank is forged with short horizontal and vertical movements of the tool avoiding large horizontal movements in the material.

25 2. A tool for forging a blank into a product with the method claimed in claim 1,

 c h a r a c t e r i z e d i n that the tool includes a number of upper (21) and lower (22) centre members, and first (23, 24) and second (25, 26) side members, said first
30 (23, 24) and second (25, 26) side members being shaped as blunt wedges in the inner parts engaging the blank, said first (23, 24) and second (25, 26) side members enclosing said upper (21) and lower (22) centre members defining a closed cavity with the form of product,
35 said first (23, 24) and second (25, 26) side members being adapted to upset outer parts of the blank in short horizontal movements,
 the upper(21) and lower (22) centre members being adapted

to be forced into the blank causing it to fill said closed cavity.

3. A tool as claimed in claim 4,
5 c h a r a c t e r i z e d i n said first (23, 24) and
second (25, 26) side members having sloping outer surfaces,
a number of press members (27, 28) with mating inner sur-
faces acting on said first (23, 24) and second (25, 26)
side members in order to force said first (23, 24) and sec-
10 ond (25, 26) side members together.

4. A tool as claimed in claim 5,
c h a r a c t e r i z e d i n said first (23, 24) and
second (25, 26) side members comprising upper (23, 25) and
15 lower (24, 26) parts.

5. A tool as claimed in claim 4 - 6,
c h a r a c t e r i z e d i n said first (23, 24) and
second (25, 26) side members including brake surfaces form-
20 ing a gutter.